**Oracle Administration Services**

**Database Recovery - Oracle**

Submitted to

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**By**



CIS, Wipro Limited

Document Details

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| Project Name | Innogy SE |
| Account | CIS |
| IT Component/Application Title | Database Recovery - Oracle |
| Current Version | 1.1 |
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Version History

(All revisions made to this document must be listed in chronological order. All revisions must be approved. Review and Approval can be done by an internal source or by the customer)

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| --- | --- | --- | --- | --- | --- |
| Version | Date of Revision | Description | Author | Reviewed By | Approved By |
| 1.0 | 01-01-2018 | Version 1 | Balaji Ankalle | Ajay Zende | Santosh Badiger |
| 1.1 | **15-12-2018** | **Updated the content** | **Sreya Puthukudy** | **Jiten Pansara** | **Santosh Badiger** |

Document Distribution List

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| **Sr. No** | **Name and Company** | **Purpose** |
| **1** | RWEIT-ORACLEDBA | **This document is used for the database recovery. The steps for both Complete/Incomplete Recovery have been documented. The document can be used to restore/recover the Oracle database for full/point in time recovery.** |
| **2** |  |  |

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# Purpose

This document has been prepared to support with the technical steps required for database recovery.

# Scope

This document is prepared for RWE UK Wipro Oracle team and provides the steps to recover the database in case of any issues from previous backup copy.

# Complete Database Recovery:

* For TSM based Backups validate the TSM opt file configuration and allocate the SBT\_TAPE channels accordingly.

**AIX/Linux**: cd /usr/tivoli/tsm/client/oracle/bin64

$./tdpoconf showenv -tdpo\_optfile=/usr/tivoli/tsm/client/oracle/bin64/tdpo\_$SID\_dft.opt

**Solaris:** cd /opt/tivoli/tsm/client/oracle/bin64

$./tdpoconf showenv -tdpo\_optfile=/opt/tivoli/tsm/client/oracle/bin64/tdpo\_$SID\_dft.opt

**Windows:** tdpoconf passw -tdpo\_optfile=C:\TSM\AgentOBA\tdpo\_%SID%\_dft.opt

Change the opt file Name as per the ORCLE SID and Platform. We will consider AIX platform the remaining of this document. For Disk based backups instead of Tape Channel; Disk channel has to be allocated.

The complete database recovery is possible when we have all the required archive and redo logs available for recovery and the DB recovery is required to mitigate from database failure(data files).

* Restore Spfile

Startup nomount the database using RMAN for spfile restore.

RMAN> startup nomount

Connect to Target and Recovery Catalog

RMAN > restore spfile;

* Post restore of spfile; shutdown the database and startup nomount using sqlplus.

SQL > shut immediate

SQL> startup nomount

* Restore control file

Connect to Target and Recovery Catalog

run

{

allocate channel ch1 type SBT parms 'ENV=(TDPO\_OPTFILE=/usr/tivoli/tsm/client/oracle/bin64/tdpo\_$SID\_dft.opt)';

restore controlfile;

sql ‘alter database mount’ ;

release channel ch1;

}

* Restore & Recover database

Start the database recovery.

Allocate number of channel based on the requirement and feasibility.

run

{

allocate channel ch1 type SBT parms 'ENV=(TDPO\_OPTFILE=/usr/tivoli/tsm/client/oracle/bin64/tdpo\_$SID\_dft.opt)';

allocate channel ch2 type SBT parms 'ENV=(TDPO\_OPTFILE=/usr/tivoli/tsm/client/oracle/bin64/tdpo\_$SID\_dft.opt)';

restore database;

recover database;

sql 'alter database open resetlogs';

release channel ch1;

release channel ch2;

}

* Validate Post Recovery

Post RMAN session completion, validate using below

SQL> select \* from v$recover\_File;

SQL> select distinct status from dba\_Data\_Files;

# Incomplete database recovery:

* There are multiple scenarios where incomplete/point in time database recovery might be required because of reasons like User error, loss of an archived log file, loss of redo log files etc. The Run clause for database restore/recovery will vary based on the condition and the requirement.
* Incomplete Recovery Until a Log Sequence Number

RUN

{

allocate channel ch1 type SBT parms 'ENV=(TDPO\_OPTFILE=/usr/tivoli/tsm/client/oracle/bin64/tdpo\_$SID\_dft.opt)';

SET UNTIL SEQUENCE 1234 THREAD 1;

RESTORE DATABASE;

RECOVER DATABASE; # recovers through log (1233)

SQL ‘ALTER DATABASE OPEN RESETLOGS’;

}

* Incomplete Recovery Until to a Specified SCN

RUN

{

allocate channel ch1 type SBT parms 'ENV=(TDPO\_OPTFILE=/usr/tivoli/tsm/client/oracle/bin64/tdpo\_$SID\_dft.opt)';

RESTORE DATABASE;

RECOVER DATABASE UNTIL SCN 1000; # recovers through SCN 999

SQL ‘ALTER DATABASE OPEN RESETLOGS’;

}

* Incomplete Recovery to a Point in Time

RUN

{

allocate channel ch1 type SBT parms 'ENV=(TDPO\_OPTFILE=/usr/tivoli/tsm/client/oracle/bin64/tdpo\_$SID\_dft.opt)';

SET UNTIL TIME 'Jan 1 2018 09:00:00';

RESTORE DATABASE;

RECOVER DATABASE;

SQL ‘ALTER DATABASE OPEN RESETLOGS’;

}